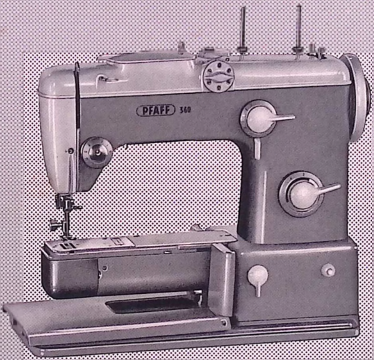
PFAFF

AUTOMATIC 360



INSTRUCTION BOOK

PFAFF® 360 Automatic

I N S T R U C T I O N S

FOREWORD

Your dreams has come true!

You are now the proud owner of a Pfaff 360 Automatic -- the sewing machine with unlimited possibilities.

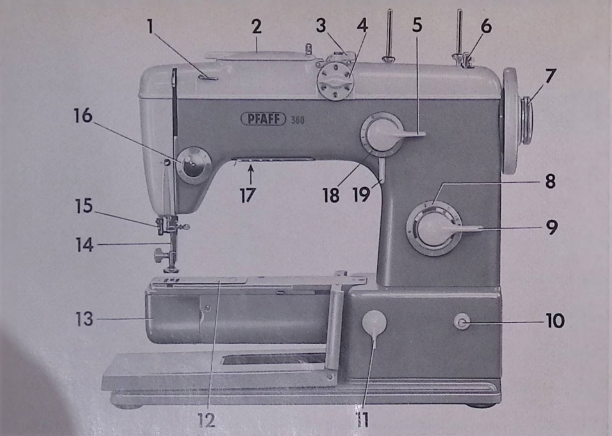
This instruction book will help you understand the machine and give you valuable tips to make sewing more fun for you.

Even if you are an experienced seamstress, you will find this book a valuable guide to easy sewing -- Pfaff Automatic Sewing.

Follow these simple instructions and familiarize yourself with the exclusive automatic features of your machine. You will find sewing exciting on your easy-to-operate Pfaff Automatic.

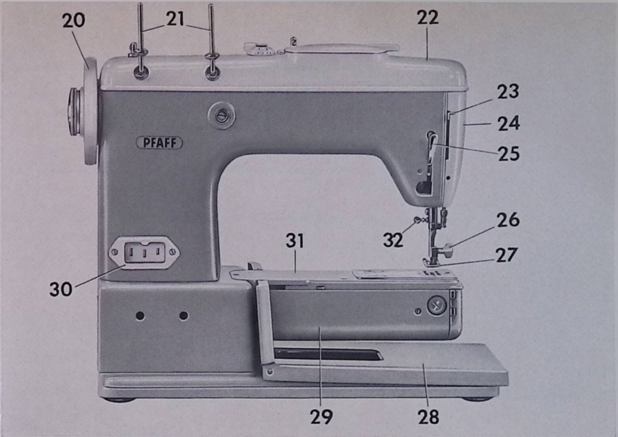
If you have any sewing problems, please contact your Pfaff dealer. He will be glad to help you at any time.

Pfaff International Corporation
New York, N. Y.

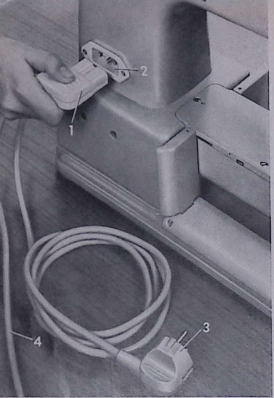


R 8357

1 Thread take-up lever
2 Top control (D) cover
3 Embroidery pattern length lever (E)
4 Dial (C)
5 Zigzag finger-tip control
6 Bobbin winder
7 Stop motion knob
8 Stitch length dial
9 Reverse feed control
10 Light switch
11 Drop feed control
12 Needle plate
13 Free arm cover (enclosing transverse rotary sewing hook)
14 Needle
15 Automatic needle threader
16 Needle thread tension
17 Sewlight
18 Stitch width dial A
19 Needle position lever B



20	Balance wheel	25	Presser bar lifter	29	Free arm
21	Collapsible spool pins	26	Sewing foot thumb screw	30	Receptacle for speed control and power cords
22	Top cover	27	Sewing foot	31	Free arm top cover
23	Needle threader control	28	Snap-out workplate	32	Needle set screw
24	Face cover				

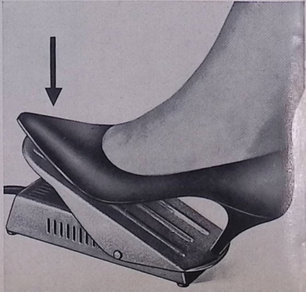


DR 734

Electrical Information

Push plug **1** into receptacle **2**, and plug **3** at other end of cord into the wall outlet. Cord **4** connects the foot control with the machine.

Place the foot control under the cabinet within easy reach of your foot. Rest the right foot on the speed control and press. The harder you press, the faster the machine will run.



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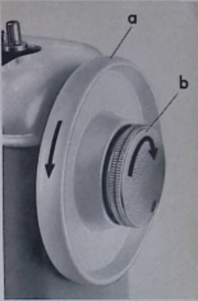
Fundamentals of Machine Operation

R 8358



Make sure stop motion knob **b** is tightened before you begin sewing (clockwise as indicated by black arrow).

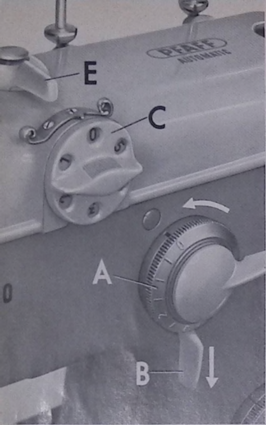
Whenever you have to turn balance wheel **a**, turn it toward you (counter-clockwise as shown by black arrow). ▶

Never run a threaded machine unless you have fabric under the presser foot.

The machine will feed the material under the sewing foot automatically. All you have to do is guide the work. Never try to hasten feeding by pushing or pulling the fabric while stitching because the needle may bend or break.

Always turn the balance wheel toward you until take-up lever **d** is at its **highest** position before you begin and after you have completed a seam. Failure to observe this rule may cause the thread to slip out of the needle eye. Also, it is easier to remove the work with the take-up lever up. ▶

R 8251



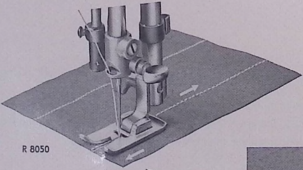
R 8252 A

Straight Stitching

◀ Set: Dial C=0 · Dial A=0 · Lever B= ←

Lever **E** engages and disengages the Automatic mechanism. If you don't need this mechanism for a longer period, set lever **E** at "0".

This setting is indicated on pages 34 to 53 as follows:
A=0; B=↓; C=0; E=0



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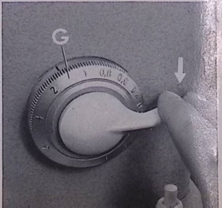


Dial **G** regulates the stitch length (the higher the number on the dial, the longer the stitch). To back-tack the end of a seam, simply depress the finger-tip control. ▶

R 7998

Zigzag Sewing

Set: Dial C=0

If you want to sew a few wide zigzag stitches while the machine is set for straight stitching (**A** on 0), merely press down the finger-tip control. When the lever is released, the machine resumes straight stitching automatically.

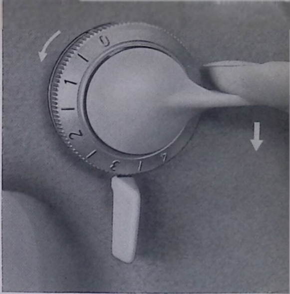
To sew longer zigzag seams, turn dial **A** to desired stitch width (indicated by numbers 1 to 4).

When dial **A** is set between 1 and 2, you can double the stitch width by depressing the finger-tip control (important for making buttonholes).

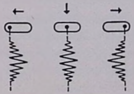
When you push the control up, the machine will sew straight, regardless of the stitch width set (ideal for tying off zigzag seams).

Lever **B** changes the position of the needle in the needle plate slot. Thus the stitching can be moved from the center to the left or right of the slot, as desired.

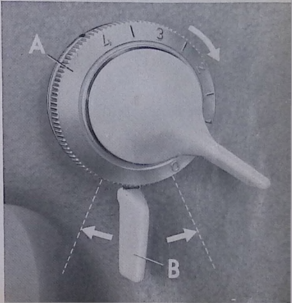
R 7999



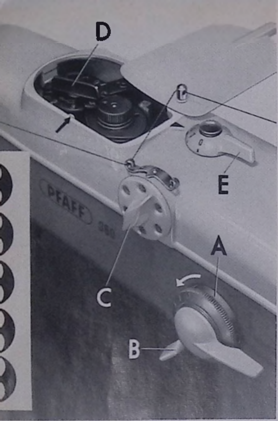
The position of lever **B** (left, center, right) indicates the position of the needle in the needle plate slot.



Dial **G** lengthens zigzag stitches or packs them more closely together (satin stitch).



R 7995



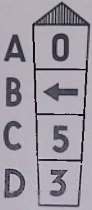
R 8253 A

Setting Machine for Automatic Embroidery

Set: Lever E=3

Swing back the cover on control **D**.

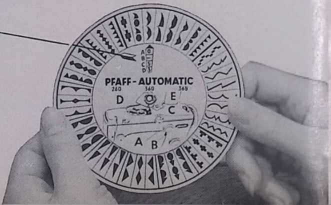
Your embroidery design dial shows all the primary designs you can make with the Automatic. Pick your design and turn the dial so it points to that design. The numbers in the slot indicate the machine dial settings which will give you the design you have chosen.



Here is an example:

Turn control **A** to 0.
Flick lever **B** left (as indicated by arrow).
Turn dial **C** clockwise until 5 is at top.
Turn dial **D** clockwise until 3 is opposite red mark (see arrow).

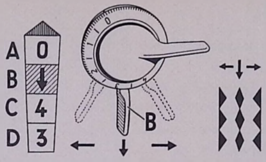
And watch your Automatic conjure up the design you want. To ensure that the zigzag stitches are packed closely together, set dial **G** (page 6) between 0.2 and 0.4, depending on the type of fabric and the thread size.



Important

To avoid heavy working of the automatic embroidery mechanism after periods of idleness, occasionally set lever **E** on 3, dial **D** on 4, and dial **C** on 5. Then unthread the needle, raise the presser bar lifter and run the machine for a few minutes. To obtain an attractive design, set dial **G** (page 6) between 0.2 and 0.4 (depending on type of fabric and thread size) so that stitches are packed closely together.

R 8045



The arrow appearing in box B indicates whether lever **B** should be moved to the right, left or central position. ◀

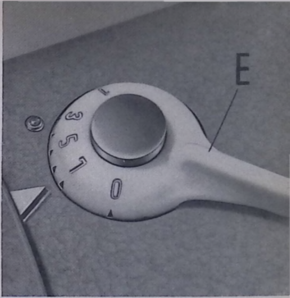
▲

You can produce a nice border effect (see above illustration) by simply moving lever **B** from the left to the center and right, without changing settings A, C and D. This is an advantage of the Pfaff-Automatic.

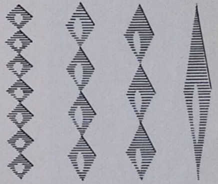
Most designs are made with dial **A** set on "0" (see box A on dial wheel) so that this setting need hardly be changed.

A Big Advantage of the Pfaff-Automatic ▶

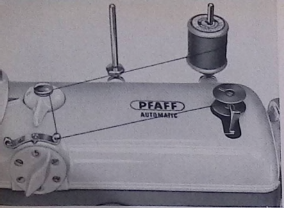
Each of the primary designs pictured on the embroidery design dial can be sewn in different lengths. Therefore you can vary the appearance of the pattern without changing the stitch length. The pattern length is controlled by lever **E**, which has seven graduations -- four numbered (1, 3, 5 and 7) and three unnumbered. Maximum pattern length is obtained by setting lever **E** on "7", and minimum length by setting it on "1". When it is set on "0", the Automatic mechanism is disengaged.



R 7095



Lever **E** at: *1* *3* *5* *7*



R 8254 A

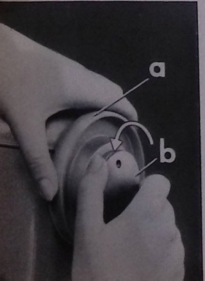
Winding the Bobbin

① Hold balance wheel **a** and turn stop motion knob **b** all the way to the left (counter-clockwise).

② Place spool of thread on right-hand spool pin. The bobbin thread should always be the same size as that used on the spool, or a little finer.

③ Pull thread from spool and lead it clockwise around thread retainer stud **g**, crossing the thread.

1



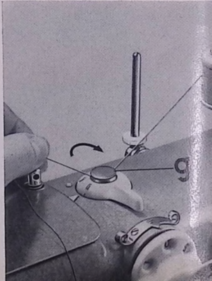
R 6036

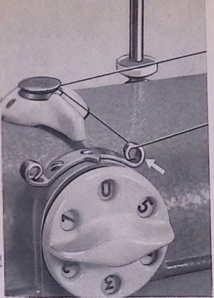
2

R 7101

3

R 7096





R 7100 4

④ Pull it through thread guide.

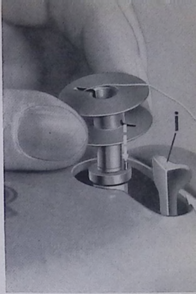
⑤ Pass end of thread through slot in bobbin, from inside. Set bobbin on bobbin winder spindle so that key at base of spindle enters slot in bobbin. Press in lever **i**.

⑥ Hold end of thread and slowly start machine. Having wound a few turns, break off end of thread and continue winding at a faster pace.

⑦ Bobbin winder will stop automatically when bobbin is full.

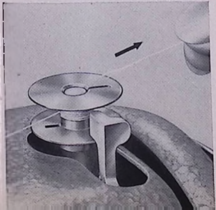
⑧ If you don't want a full bobbin, press out lever **i** when sufficient amount of thread has been wound.

You may continue sewing while you are winding bobbin without disconnecting balance wheel.



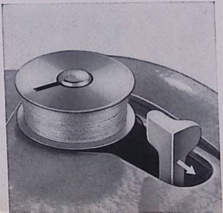
5 R 7102

6



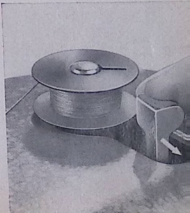
R 7067

7

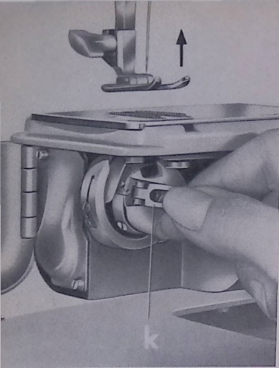


R 7097

8



R 7099



R 8157

▲

Removing the Bobbin Case

Raise needle to its highest point and open free arm cover. Lift latch k with your forefinger. Pull out bobbin case with bobbin by holding the latch. When you release latch **k**, the empty bobbin drops out.

Inserting a Full Bobbin into Bobbin Case

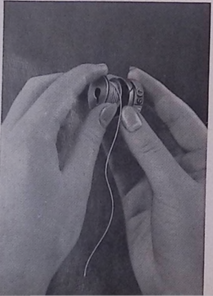
① As shown in illustration 1, hold bobbin in left hand so that the thread end falls from the top down toward you, and insert bobbin into bobbin case.

② Hold the bobbin firmly in the bobbin case and pull the thread into the case slot.

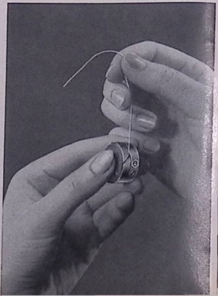
③ Pull the thread under the tension spring until it emerges from the opening at the end of the spring. Leave about three inches of thread hanging from the bobbin case.

④ Hold the case by its open latch, so that the bobbin cannot fall out. ▼

R 5867 **1**



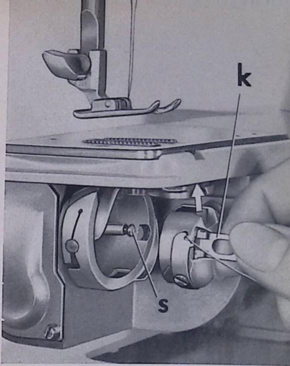
R 5869 **2**



Inserting the Bobbin Case

Make sure the needle is still in its highest position.
With thumb and forefinger of left hand, lift latch **k** and turn bobbin case until slot at end of latch points up (see arrow). Then place it on center stud **s** of hook.

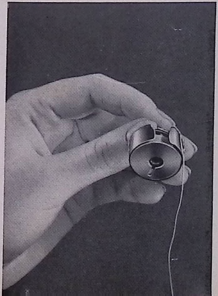
In replacing the bobbin case, it is best to hold the loose end of thread so that it will not get jammed between bobbin case and hook. Release latch **k**.



R 8159

3 R 5870

4 R 5868



▲

Press against bobbin case until you hear it snap into place. An improperly inserted bobbin case will cause needle breakage.

Close free arm cover.

Recommended Needle and Thread Sizes

The appearance of the finished seam is dependent on the correct relationship between needle, thread and fabric. Select the proper thread sizes and needles from this chart. The same size threads should be used in the needle and on the bobbin. Some experienced seamstresses prefer a somewhat thinner bobbin thread. However, the bobbin thread never should be thicker than the needle thread.

Types of Fabrics	Mercerized Cotton	Silk	Needle Size
Fine Fabrics such as georgette, chiffon, batiste, voile, lawn, silk.	80 to 100	0 to 000 twist	60 or 70
Lightweight Fabrics such as dress silks and cottons, sheer woolens, shirting, draperies.	70 to 80	A & B twist	80
Medium Fabrics such as lightweight woolens, madras, muslin, brocades, heavy silks and rayon, gabardine.	50 to 70	B & C twist	90
Heavy Fabrics such as coating, denim, corduroy, slipcover fabrics, bed tickings, lightweight canvas.	40 to 50	C & D twist	100
Very Heavy Fabrics such as heavy tickings, canvas, overcoating, sailcloth, upholstery.	24 to 40	E twist	90 to 110
Synthetics, Rayon, Acetate including nylon, orlon, dacron, plastics, etc.	Determined by weight of fabric 40 to 50		Determined by thread size 60 to 80

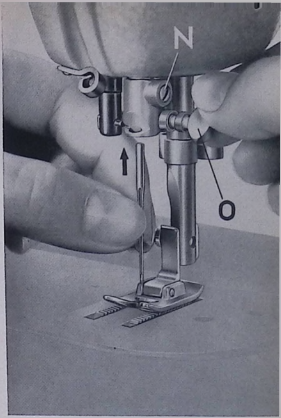
Important Facts about Needles

On Pfaff 360 sewing machines, System 130R, flat-shank needles are used for all ordinary sewing and embroidery work. The needle system is stamped on the needle plate. Genuine Pfaff needles, System 130R, are available from every Pfaff dealer. Bent or blunt needles should not be used.

Changing the Needle

Bring needle bar to its highest point and lower sewing foot.

Loosen needle set screw o half a turn ↙ and pull old needle out of needle clamp. Insert new needle into opening of needle clamp and push it up as far as it will go. Make sure that flat side of shank faces toward the back and long groove toward you. Tighten needle set screw o.

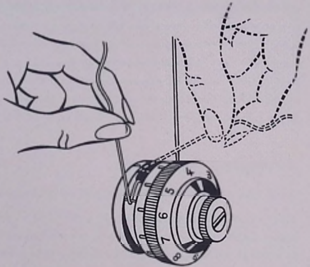


R 6798

Upper Threading

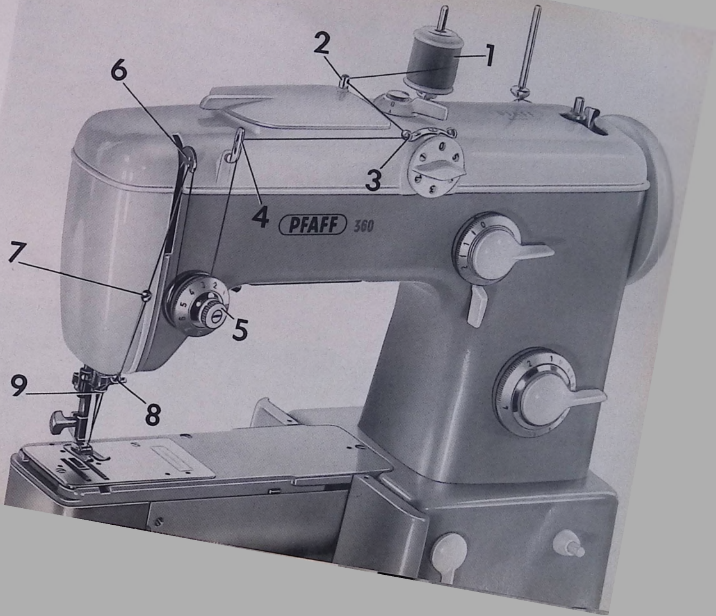
Place spool of thread on spool pin 1 and lead thread end through holes in thread guides 2 and 3 and through both thread retainer openings 4 (see illustration opposite).

Pull thread between any two of tension discs 5, as illustrated, and jerk it far over to the right so that it slips properly into the slot and under the thread check spring. At the same time, press the thread passing down to the tension against the top cover of the machine.



Bring take-up lever 6 as high as it will go and pass thread from right to left through one of the holes at its end. Pull thread into slots at left of thread guides 7 and 8 and then into the slot at left of needle clamp 9.

Then thread needle, front to back. The automatic needle threader will do this for you easily and quickly.



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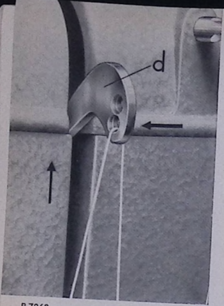


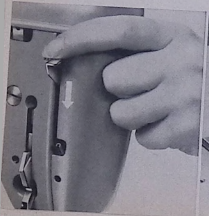
R 7068

Operating the Needle Threader

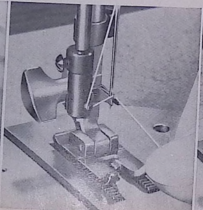
◀ Before you begin, make sure that the needle is at its highest position, i.e. that the lower hole of the ascending take-up lever d is in line with the bottom edge of the top cover. Now lower the sewing foot and --

1. With your left hand push needle threader control down until threader prong w (see opposite page) penetrates needle eye. Keep control in this position.
2. Hold thread loosely and lead it from left around the small pin, then place it behind hook of threader prong.
3. Release control slightly until prong w reverses and pulls thread through needle eye.
4. Jerk control down again so the thread loop will fall off the prong. Pull thread through needle eye and release control.

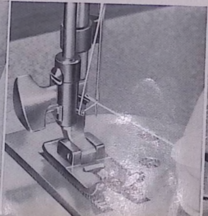
DR 086 1



R 8013 2



R 8009 3



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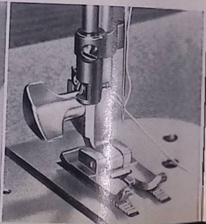


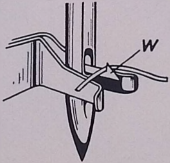
R 8158

When you have had sufficient needle threading practice, you may shorten the procedure as follows:

Push needle threader control down. Place thread behind hook of prong w so that its end is about 1/2 inch to the right of the prong. Slowly release control. Prong w now pulls end of the thread – instead of the loop – through needle eye.

Since take-up lever d is not at its highest point when you thread the needle, pull about four inches of thread through the needle eye before you begin sewing.

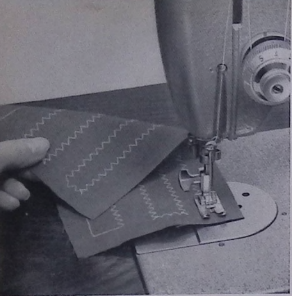
▼



Drawing Up the Bobbin Thread

▲

Hold needle thread lightly in your left hand. Turn balance wheel toward you until the needle moves down and up again and take-up lever reaches its highest position. Lightly pull needle thread to draw bobbin thread up through needle plate slot. Place both threads back under sewing foot before you put fabric into machine.



R 8150

Correct Tension Regulation

Balanced tensions are essential for sewing. If your tension is correct, you will have perfect seams as sketched below (III).

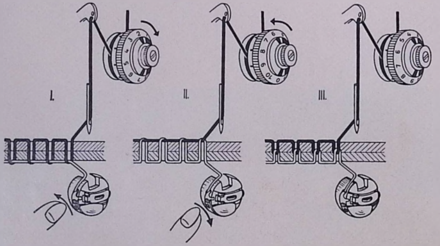
Sketch I -- The threads interlock on the underside of the fabric.

Cause: Upper tension too loose or lower tension too tight.

Sketch II -- The threads interlock on the surface of the fabric.

Cause: Upper tension too tight or lower tension too loose. ▼

▲
To check whether the tensions are correctly balanced, take a closely woven piece of fabric and sew a few straight and zigzag seams. If the straight stitches are tightly drawn in on both sides of the fabric (see seam sketch III), the tensions are correct. The surest way to double-check this is by examining a zigzag seam. If the zigzag seam is equally wide on surface and underside of the fabric, that is, if the threads are locked exactly at the zigs and zags of the seam, the tension adjustment is correct.



Regulating the Thread Tension

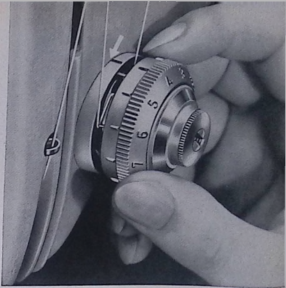
The bobbin thread tension rarely needs adjusting, except for embroidery when it should be a little tighter than for ordinary sewing. Adjustment is made by a small knurled screw on the bobbin case which can be turned with the thumb tip.

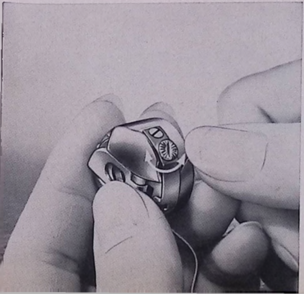
Turn it left ← for looser tension.
Turn it right → for tighter tension.

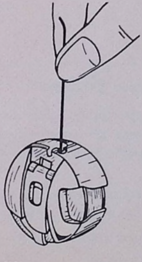
Determine correct bobbin tension by holding the thread end between thumb and forefinger and letting the bobbin case hang freely. The tension should be strong enough to keep the bobbin case from being pulled down by its own weight. However, as you jerk your hand slightly, the bobbin case should gradually slide down.

▼

DR 079







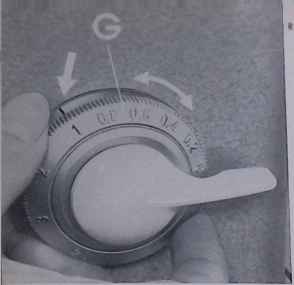
R 8029

The final stitch appearance can be regulated by the upper tension dial, as follows:

Turn left ← for looser tension.
Turn right → for tighter tension.

The upper tension is so designed that all grades of tension – loose to tight – can be covered with one complete turn of the tension dial. The numbers on the tension dial indicate different degrees of tension. The higher the number, the greater the tension. Only in very rare cases will it be necessary to reset the tension. For ordinary sewing, the upper tension should be set between 3 and 5.

Your upper tension has a third tension disc for two-needle work.

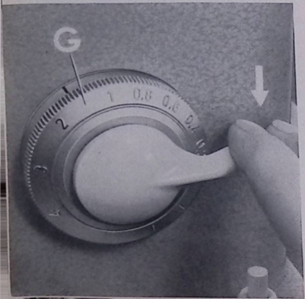


R 7996

Stitch Length Regulation

Turn dial **G** until the number indicating the desired stitch length is opposite the mark on the dial housing (see straight arrow). Or sew a few stitches and regulate stitch length as required.

To facilitate satin stitching, the 0–1 range on the scale is just as large as the 1–4 section. The setting depends on the type of fabric and thread size used. For normal satin stitching, set dial on 0.2.



Reverse Sewing

To backtack the beginning or end of a seam, simply press the finger-tip control down. When the control is released, the machine resumes forward sewing automatically. This feature is ideal for darning rips with the ordinary sewing foot.

To do this, operate the control in rhythm and move the fabric slightly sideways. In this way, one seam is placed neatly beside the other.

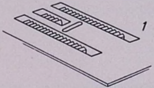
The reverse stitches will be about the same length as forward stitches.

R 7998

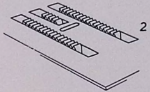
Dropping the Machine Feed

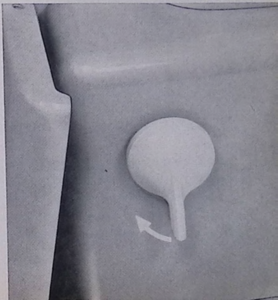
The machine feed is dropped for darning with the aid of the vibrator, for hoop embroidery and button sewing.

① To lower feed below the needle plate, turn drop feed control clockwise. Fabric will cease feeding.

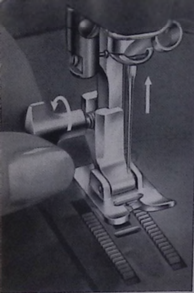


② When the control is turned to the right as far as it will go, feeding of the fabric resumes automatically when you start sewing.

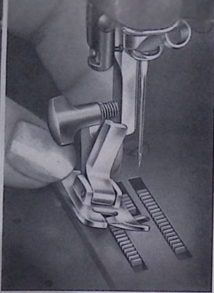




R 8160



R 7085



R 7086

Changing the Sewing Foot

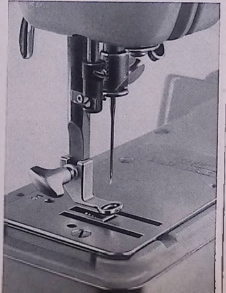
Lift both needle and presser bars to their highest positions and turn the sewing foot thumb screw to the left. Tilt the foot sideways and pull it down. Slip on new foot and tighten the screw securely.

◀

Darning Foot and Vibrator

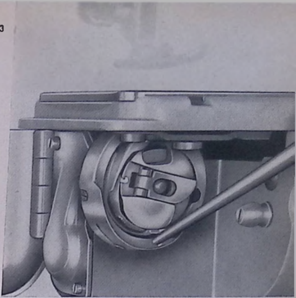
Attach darning foot No. 53670, as instructed above. Drop machine feed and lower presser bar lifter. As the machine sews, the vibrator moves presser bar and darning foot up and down. The fabric is thus held down when it is entered by the needle, and can be moved freely when the needle has risen clear again. Hold the fabric taut with both hands as you move it back and forth under the needle. (Only delicate fabrics should be clamped into hoops).

▶



DR 083

R 8143



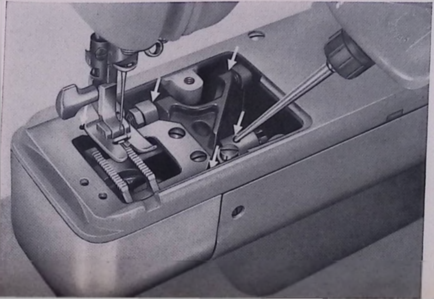
Care and Maintenance

Longevity and smooth machine performance are dependent on regular and proper cleaning and oiling.

Use Pfaff sewing machine oil only. Never lubricate machine with animal or vegetable oils. Remove all lint before oiling.

All moving and rotating parts require regular lubrication. It is advisable to establish a pattern when oiling your machine. Begin by removing the needle plate and oiling the mechanism in the free arm. The principal oiling points are marked by arrows.

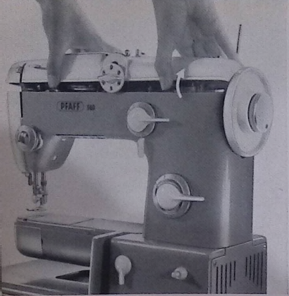
▼



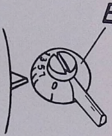
R 8261

▲

The raceway in the sewing hook is the most important oiling point. Put one drop of oil into the raceway **each day you sew.** A dry raceway will cause rapid wear. Don't forget to put a drop of oil into each of the two oil holes behind the sewing foot. This is essential to keep the hook shaft bearing oiled.



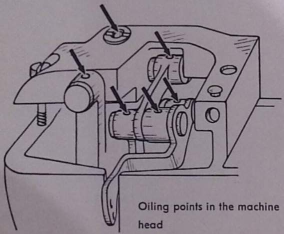
R 8346



The oiling points in the machine arm can be reached easily by removing the top cover. Oil should be applied sparingly. Excessive quantities of oil may soil the work and cause machine sluggishness. One or two drops of oil usually will suffice.

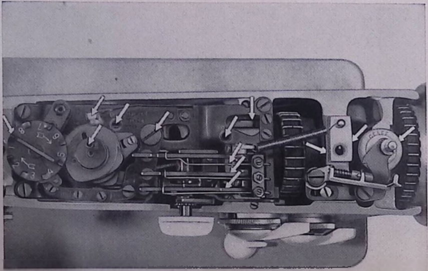
Before you remove the top cover, set lever **E** between 5 and 7.

To pull cover up, tilt it back and lift.



Oiling points in the machine head

R 8460

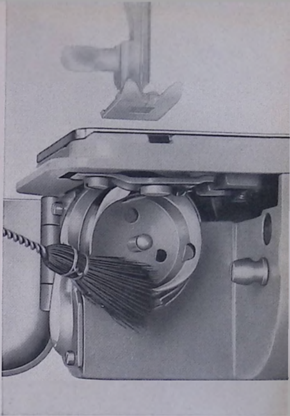


R 8161

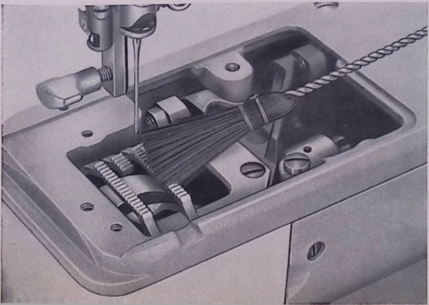
Regular Machine Care

Accumulations of lint packed between the tooth rows of the feed cause noisy operation of the machine. Therefore, from time to time, remove the needle plate and clean the feed with a toothpick or similar wooden object.

The needle plate is held in place by a press stud and can be removed without a screwdriver. To do this, lift back end first and tilt out.



R 8237



▲

Open the free arm cover and take out bobbin case and bobbin. With a soft brush remove the lint which has accumulated in the vicinity of the sewing hook.

Once in a while your Pfaff should be given a thorough checkup by your Pfaff dealer.

Sewlight Facts

The 15-watt sewlight is recessed under the machine arm and can be swung out by pulling down the grille.

To change the light bulb:

Push bulb into socket, turn left, and pull out.

When inserting new Pfaff light bulb, be sure to slide bulb pins into bayonet socket slots.

Press bulb in and turn right. Close grille. Note voltage of electric circuit.

R 8066

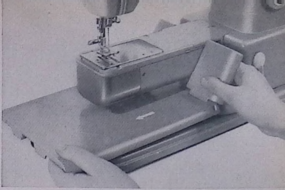
R 8067

▶ Press the button on the front of the machine base to switch the sewlight on and off.

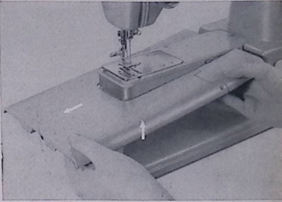
R 6160 A

The Snap-Out Workplate

DR 696

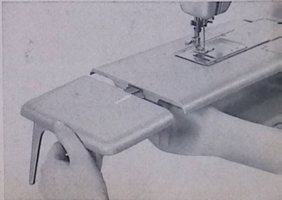


Your Pfaff Automatic has a snap-out workplate which can be raised to give you a full-size work area for flat sewing and embroidery. To raise workplate, pull it out to the left as far as it will go, then lift it until it is flush with the needle plate. Now let it snap into position.



When you want to use the free arm for darning, lower the workplate, proceeding in reverse order.

DR 697



Larger articles may require a larger work surface. To further increase the sewing area, attach the workplate extension which is in the carrying case. Swing out the collapsible legs.

DR 698

Trouble Shooting

1. Machine Skips Stitches

Cause:	Remedy:
Needle incorrectly inserted.	Push needle up as far as it will go and be sure that the long groove faces toward you, and flat side of shank away from you.
Wrong needle.	The correct needle system is stamped on bed slide. (For ordinary sewing, use System 130R needles.)
Needle bent.	Insert new needle.
Machine threaded improperly.	Check and correct threading as instructed on pages 16 and 17.
Needle too fine or too thick for the thread.	Use correct needle and thread.

2. Needle Thread Breaks

Cause:	Remedy:
The above mentioned may cause thread breakage.	See remedies listed under 1. above.
Thread tension too tight.	Adjust tensions as instructed.
Poor, knotty or rotten thread used.	Use good quality threads only.

Hook raceway is jammed with thread or needs oiling.	Clean and oil hook raceway.
Burrs or sharp edges on needle plate slot.	Polish needle plate slot with fine emery cloth.

3. Needle Breaks

Cause:	Remedy:
Bent needle strikes point of sewing hook.	Replace needle at once to prevent further damage.
Needle too thin or thread too heavy.	Use correct needle and thread sizes.
Fabric pulls needle so it bends and strikes needle plate.	Don't force the feeding motion. Guide the material lightly.
Bobbin case inserted incorrectly.	Push bobbin case until you hear it snap into place.

4. Faulty Stitch Formation

Cause:	Remedy:
Improper tension.	Adjust tensions as instructed.
Thread too heavy, knotty or hard.	Use only first-rate thread –– the correct size for the needle and fabric.
Bobbin unevenly wound.	Don't run thread over finger when winding the bobbin, but lead it around thread retainer stud on top cover and through thread guide.
Pieces of thread between tension discs.	Raise presser bar lifter and remove thread.

5. Machine Feeds Improperly

Cause:	Remedy:
Feed dog set too low, does not rise up enough above needle plate level.	Have your Pfaff dealer make the necessary adjustment.
Accumulations of lint packed between feed teeth.	Take off needle plate and remove lint with a stiff brush.

6. Machine Works Heavily

Cause:	Remedy:
Motor belt is too loose, or has shrunk and causes excessive pressure on bearings.	Have your Pfaff dealer adjust the belt tension.
Machine works heavily when automatic embroidery mechanism is engaged.	See note on page 8.
Hook raceway lacks oil or is obstructed by pieces of thread.	Clean and oil hook raceway.
Mechanism clogged by inferior oil.	Use only Pfaff sewing machine oil –– never salad oil or glycerine.
Bobbin winder working while sewing (when a bobbin is not being filled).	Stop bobbin winder.

Thread Jamming

The new Pfaff rotary hook will not normally jam, even if the machine should be handled improperly.

If thread should happen to jam in the raceway of the sewing hook, the power of the motor in most instances will be sufficient to overcome hard working of the mechanism.

If this action should not free the jammed thread, put a drop of oil into the hook raceway, jerk the balance wheel back, then jerk it back and forth.

Thread jamming can be avoided, however, if you follow the instructions on page 5.

Using Sewing Feet and Attachments (for settings see page 6)

Zipper Insertion

Machine Setting:
Dial A=0 · Lever B=➔
Dial C=0 · Lever E=0

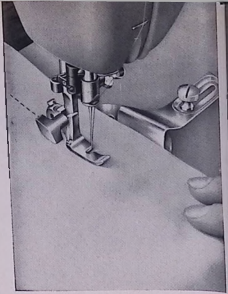
Pin or baste closed zipper on wrong side of fabric. Position of zipper depends on whether or not you want the edge of the fabric to overlap the zipper. Turn fabric to right side. Run a straight seam close to left edge of zipper, stitch across end and up the other side in one continuous operation. Use right edge of foot as a guide. For other types of zipper insertion, follow directions in your zipper package. ▼

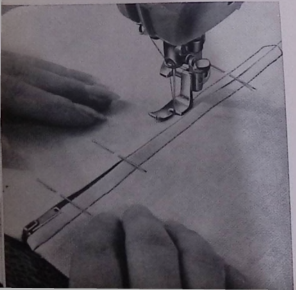
Edge Stitching

Machine Setting:
Dial A=0 to 4 · Lever B=↓
Dial C=0 · Lever E=0

Sew parallel rows of straight or zigzag stitches at various distances from the fabric edge by using adjustable seam guide No. 53077 and the edge stitcher (without quilting gauge). The seam guide is fastened to the machine bed with the long thumb screw. For wider marginal stitching, turn edge guide half a turn and use low end as a guide. To sew narrow parallel seams, guide fabric edge or preceding seam along right edge of sewing foot, using no edge guide. ▶

R 7153 A



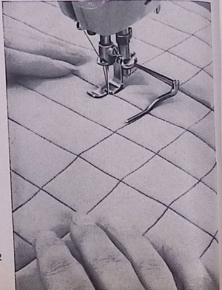


R 8033

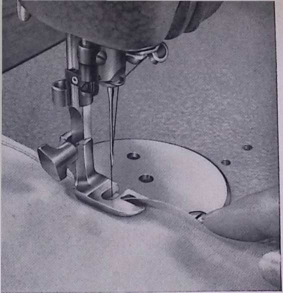
Quilting

Machine Setting:
Dial A=0 or 2 · Lever B=↓
Dial C=0 · Lever E=0

Edge stitcher No. 41350 used with the quilting gauge sews parallel rows of stitching over the entire surface of the fabric. Always guide the gauge finger along the preceding row of stitches. Attractive tea cosies, slippers, seat pads and covers can be quilted. ▶



R 8032



R 7171

41242

Flat Felled Seams

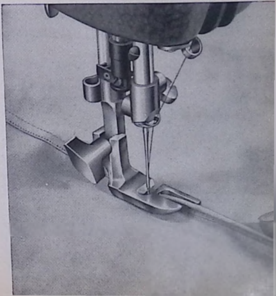
Machine Setting: Dial A=0 or 2 (optional) · Lever B= ↓
Dial C=0 · Lever E=0

◀ Flat felled seams are used to durably join two pieces of fabric. They are made in two operations.

Flat felled seams usually are straight stitched. Narrow zigzag stitches are used for felling on elasticized fabrics only.

First Seam

Lay pieces together with the wrong sides facing and the bottom piece protruding 1/8 inch. Feed both pieces into felling foot, as illustrated, so that the bottom fabric is folded over edge of top piece and stitched down. Make sure that protruding seam allowance is not folded twice.



R 7154

Second Seam

Open the two pieces, place them under the needle right side up, insert seam ridge into felling foot opening, and stitch down to the left. Make sure that second seam is placed close to the edge but not beyond it.

The felling foot has a needle slot, rather than a needle hole, to permit zigzag felling.

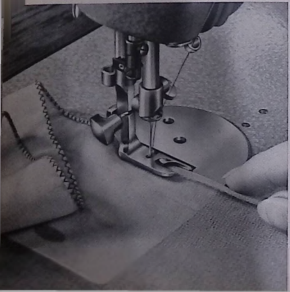
46261

Rolled Hems

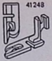
Machine Setting: Dial A=2 to 4 · Lever B= ⬇
Dial C=0 · Lever E=0

Rolled hems are used to finish sheer or delicate fabrics. For a smooth, unpuckered hem, ease thread tension slightly and set dial **A** on 2 or 3. To hem tricot fabrics, increase the tension and use the widest zigzag stitch so the hem has a rolled shell effect.

▼



R 7375



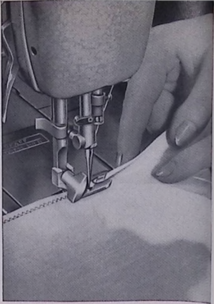
41248

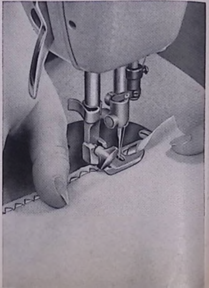
Hemming

Machine Setting:
Dial A=0 or 2 to 4 · Lever B= ⬇
Dial C=0 · Lever E=0

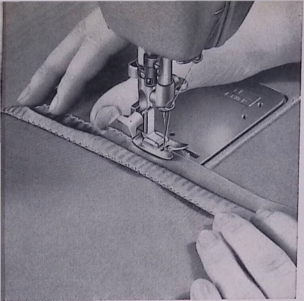
The hemmer foot is indispensable if you want to sew a uniform hem. You can hem with straight or zigzag stitches, depending on the type of fabric you are using. Clip off the corner of the fabric to facilitate insertion into the hemmer foot. Feed fabric so that the raw edge is in line with the left edge of the hemmer foot opening. If you feed less, the fabric will not be folded twice and the raw edge will show. Avoid ugly ends by slowing down feeding. To do this, press the fabric against the needle plate on the left side of the foot before you come to the end of the hem.

R 6083





R 5915



R 6070

Overcasting Edges

Machine Setting: Dial A=2 to 4 · Lever B=🡇 · Dial C=0 · Lever E=0

Overcasting prevents frayed edges. Use a long, wide zigzag stitch and sew edge with the needle taking one stitch into the fabric and the other over its edge. You may overcast edges after fabric is cut and before the pieces are joined.

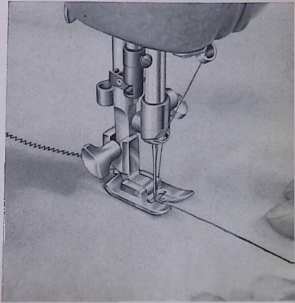
◄

Butt Seaming

Machine Setting: Dial A=3 or 4 · Lever B=🡇
Dial C=0 · Lever E=0

Two similar pieces of fabric which do not ravel easily may be butted together and joined with zigzag stitches. Worn bed sheets may be mended this way. Cut out worn center strip. Place the selvaged edges of the remaining pieces of sheet under the sewing foot so that the abutted edges are centered under the needle. Join them with close, wide zigzag stitches. Hem raw edges of sheet.

R 7169

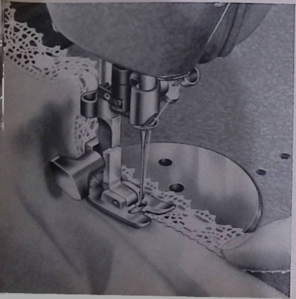


Attaching Lace

Machine Setting:
Dial A=1 to 3 · Lever B=↓
Dial C=0 · Lever E=0

You can attach lace edging in one simple operation. Overlap lace on raw edge. Sew to fabric with narrow zigzag stitches, taking one stitch into lace and fabric and the other into lace only.

▼



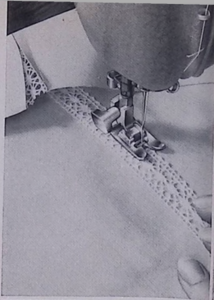
R 7170

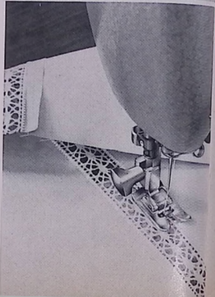
Inserting Lace

Machine Setting:
Dial A=1 to 3 · Lever B=↓
Dial C=0 · Lever E=0

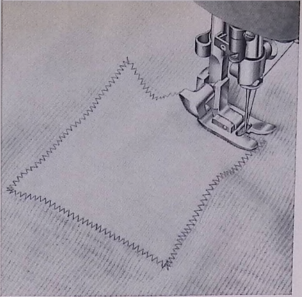
Pin or baste lace on fabric. Sew together with needle taking one stitch into fabric alone and one into the lace. Carefully trim excess fabric underneath.

R 7161





R 7177



R 7156

Inserting Patches with the Elastic Seam
(especially on elastic materials)

Machine Setting: Dial A=0 · Lever B= ← · Dial C=3 · Dial D=8
Lever E=1 · stitch length control between 0.2 and 0.6
(see also page 53)

Inserting Patches with Zigzag Stitches
(especially on non-elastic materials)

Machine Setting: Dial A=4 · Lever B= ↓ · Dial C=0 · Lever E=0
stitch length control about 0.5

Large holes can be patched quickly. Cut patch so that its grain will match the rest of the fabric. Place the patch over the damaged area.

Now you begin to oversew the raw edges with the elastic seam or the zigzag seam.

For additional strength stitch over corners twice. Turn over and trim close to seams.

Also the zigzag seam forms an elastic juncture between the material and the patch.

R 7157

Single-Needle Cording

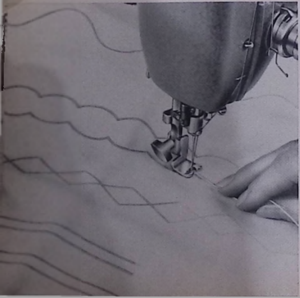
Machine Setting:

Dial A=2 · Lever B=↓

Dial C=0 · Lever E=0

Set stitch length between $\frac{1}{2}$ and 1. Trace pattern on fabric and place a filler thread under the groove in the sole of the cording foot. Follow the pattern and hold the filler thread lightly.

▼



R 7159

45121

Shirring

Machine Setting:

Dial A=2 to $2\frac{1}{2}$ · Lever B=↓

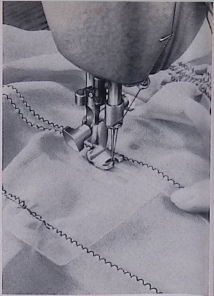
Dial C=0 · Lever E=0

Follow above directions for cording, but place filler thread under rather than on top of the fabric. Fabric and filler thread both are guided in the groove of the foot. Width of zigzag depends on thickness of filler thread used.

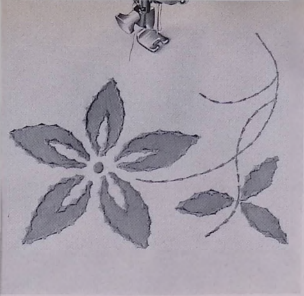
When you have finished the zigzag seam, slide material along the filler thread to distribute fullness. Finish the shirring with a line of straight stitching.

Leave filler thread in the shirring or pull it out, piece by piece, as you straight-stitch, depending on the stress to which the shirring will be exposed.

R 7162



R 7152



R 7155

Applique Work

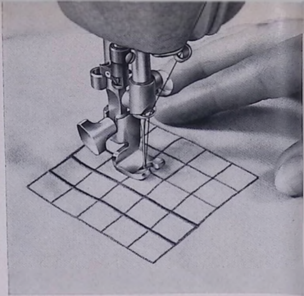
Machine Setting: Dial A = 1½ to 3 (optional) · Lever B = ↓
Dial C = 0 · Lever E = 0

Pin or baste applique on fabric and overcast edges. Appliques also can be attached with a satin stitch or any embroidery design.

R 7429

46121

R 7166

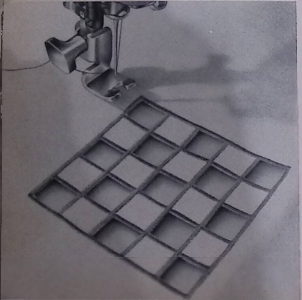


Openwork Embroidery

Machine Setting:

Dial A=0 and $2^{1}/_{2}$ · Lever B=↓ · Dial C=0 · Lever E=0

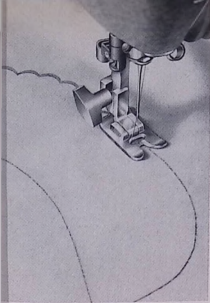
There are hundreds of patterns excellent for openwork embroidery. Although similar in appearance to applique, openwork embroidery is much simpler. Let's embroider the 25-square box illustrated. First, sew over all traced lines twice, using short straight stitches. Then sew over straight-stitch lines with a medium-wide satin stitch. Make sure that your rows of satin stitching are even so the corners of your squares look neat.

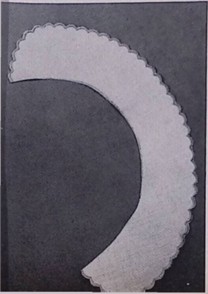


◀ When you finish sewing, cut out every other square. Be careful that you don't injure the seams.

To make an attractive modern design, outline flowers or free forms with an embroidery design instead of satin stitching.

R 7179





R 7158

Scalloping

Machine Setting:

Dial A=2 · Lever B= ← · Dial C=3
Dial D=5 · Lever E=1 to 7

Scalloping can be done in a jiffy on your Pfaff 360 Automatic. Scalloped edges can be used effectively as trimming on numerous articles.

The illustrations (left) show how scalloping adds sparkle to a child's collar. Here's how to do it. First, trace the collar pattern on a doubled piece of fabric. Set machine as indicated above, place fabric under sewing foot and guide needle along traced line. The scallops are produced automatically. You may vary the length of the scallops (see sketch) by changing the setting of lever **E**. When you have finished, trim excess fabric along scalloped edge.

R 7168

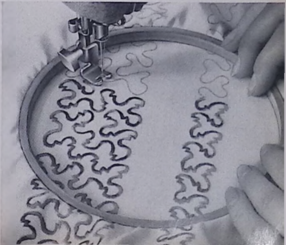
Scrollwork

Machine Setting:

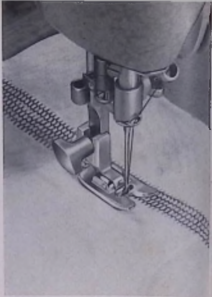
Dial A=2 to 4 · Lever B= ↓
Dial C=0 · Lever E=0

Draw designs on fabric. Clamp work into embroidery hoops. As you are following the scrollwork outline with wide satin stitches, move hoops right, then left, alternating the rhythm and the direction of your movements. An exciting note may be added by using variegated thread.

R 7150



44068

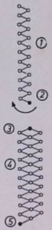


Imitation Hemstitching

Machine Setting: Dial A=$2^1/_2$ · Lever B=↓
Dial C=0 · Lever E=0

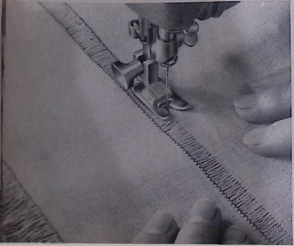
Stitch Length: 1–$1^1/_2$ · Increase Tension

Beautiful hemstitching effects on handkerchiefs, blouses, dresses, and so forth, can be made ▶ with Pfaff's System 130 (wing) needle available at Pfaff stores at extra cost. Loosely woven fabrics, such as batiste, organdy, georgette, etc., are well suited to hemstitching while woolly fabrics are not recommended because needle penetrations close up. Since the hemstitching needle has a slightly thicker shank, the needle set screw must be turned out far enough for insertion. The hemstitching needle cannot be threaded with the automatic needle threader.



Hemstitching is very simple (see sketch).

1. Sew first row on the left of the area to be hemstitched.
2. Stop machine when needle is in fabric on the right.
3. Lift sewing foot, turn fabric in the direction of arrow, and lower foot again.
4. Sew second row, as shown in sketch, guiding material parallel to first row so that needle penetrates needle holes of previous zigzag stitches as it descends on the right.
5. If you are making more than two lines of hemstitching, alternately leave needle in fabric on the left and right at turning points, pivot fabric on needle, and proceed as directed above.



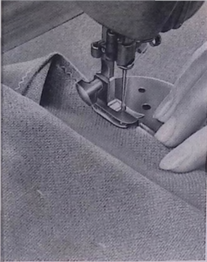
Hemstitching

Hemstitching is successful on linen and twilled fabrics. For this type of work use an ordinary needle. Draw several threads out of the fabric. Set machine for a medium-wide zigzag stitch and sew along both edges of the strip, making sure that "zigs" and "zags" in both rows are exactly opposite each other. Set stitch length according to thread bar width you desire.

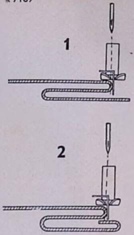
Draw threads from the edge until your fringe is the length you want. Zigzag along this line – and you will have picot edging.

R 7173

R 7140



R 7139



Blindstitching

Machine Setting: Dial A=1 to 2 · Lever B=➡
Dial C=0 · Lever E=0
Stitch Length: Maximum

Hemming dresses and skirts by hand is a laborious task. You can do it easily on your Pfaff on medium and heavy fabrics. Use zigzag foot No. 51 378 with blindstitch guide No. 46669, which you can buy at your Pfaff store. Attach the guide so that its vertical flange goes through the sewing foot slot. Use a No. 70 needle, a loose upper tension and thin thread in the needle.
Next, follow this procedure:

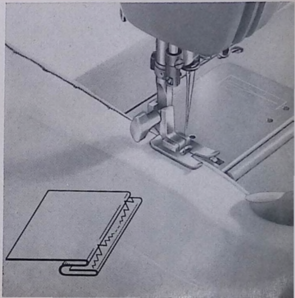
Turn fabric wrong side up. Fold selvaged material once (Fig. 1), unselvaged fabric twice (Fig. 2). It is advisable to press or baste hem. Guide work evenly, holding top hem edge against the vertical flange of the blindstitch guide. Set dial **A** so that needle takes left stitch exactly in the folded edge and right stitch up to or over the hem edge. When hem is finished, stitches will not be visible on top side.

Automatic Blindstitching

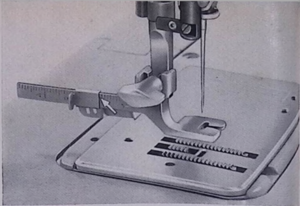
Used for draperies or curtains.
Machine Setting: Dial A=0 · Lever B=➡ · Dial C=1
Dial D=6 · Lever E=1
Stitch Length: $1-1^1/_2$

Blindstitching will be visible on the right side of sheer and filmy fabrics. Therefore these fabrics should be blindstitched using the above setting which results in a number of narrow and one wide zigzag stitch, sewn at regular intervals. Use thread that matches fabric and fold the hem as illustrated, placing bulk of material on the left side. Run upper fold along right inside edge of foot.

R 8144



R 8145



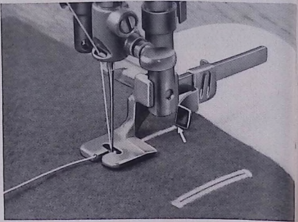
Sewing Buttonholes

Machine Setting: Dial A=1½ · Lever B= ◆ · Dial C=0 · Lever E=0
Stitch Length: 0.2

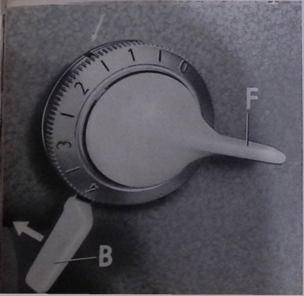
Attach buttonhole foot No. 91-054300-21 and set slide on buttonhole gauge to buttonhole length desired. The buttonhole is the right length when beginning of first seam reaches red end of slide indicator (see arrow).

The basic machine settings need not be changed in sewing a buttonhole. All special settings are made by simply pushing lever **F** up (for tying off) or down (for bartacking).

▼



R 8042

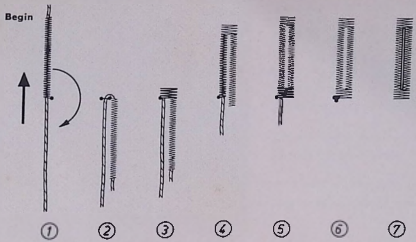


You may use also the all-purpose sewing foot No. 51991.

If you prefer more prominent buttonholes, pull a filler cord through the hole or underneath the groove on the left toe of the buttonhole foot. To get the correct stitch length, sew on a piece of scrap material. ▶

In making buttonholes in soft or loosely woven fabrics, it is advisable to place a piece of tissue paper under the material. To strengthen buttonholes in tricot and knit fabrics, insert a piece of firmly woven cotton material between the fabric layers.

R 7994



4 Release lever F. Trim filler cord at end of first stitch row. Sew second row and stop about 4 to 6 stitches from end of first row.

5 Press lever F down. Make second tack, as instructed above.

6 Push lever F up and make 3 to 4 tying stitches.

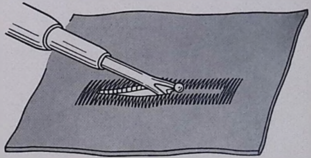
7 Trim both the sewing and filler threads. Open the buttonhole with your seam ripper. Be careful not to injure the bartacks.

Instructions for Buttonholing

1 Sew first side over a filler cord. When beginning of seam reaches slide indicator on buttonhole gauge, it is the right length. Leave needle in fabric on right side of its throw.

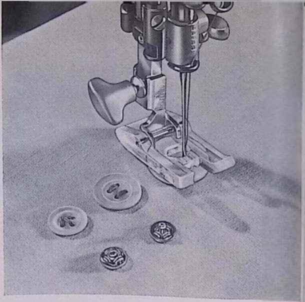
2 Lift foot, turn fabric around clockwise, using needle as a pivot. Lower foot, take one stitch to the left, pull filler cord taut and lay it parallel to completed line of stitching.

3 Press lever F down. Make 4 to 6 bartack stitches, slightly closing together buttonhole end to reduce length of bar.



Button Sewing

R 7160



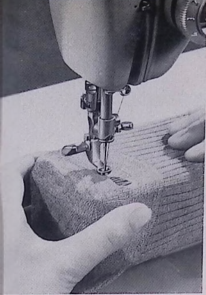
Don't be afraid to sew on buttons, hooks, eyes or rings with your Pfaff. Attach all-purpose sewing foot No. 51 991 or button sewing foot No. 46120, which can be obtained from your Pfaff dealer, and drop machine feed.

Machine Setting: Dial A=0 · Lever B= ← · Dial C=0 · Lever E=0

Place button under button sewing foot and align so that needle will enter left hole. Let needle stitch through hole and make one or two tying stitches. Raise needle. Turn dial **A** to the right, usually to 3, until needle on the right of its throw is centered over right hole. Start machine and sew as many zigzag stitches as you deem necessary to fasten button securely. Push lever **F** up and make two or three tying stitches.

When sewing on four-hole buttons, lift foot, reposition button and repeat the above process, stitching through the second pair of holes.

Hooks, eyes or rings are attached in the same manner.



DR 150

53 670

Darning

Machine Setting: Dial A=0 · Lever B= ↓

Attach darning foot, as instructed on page 24, drop machine feed, and lower presser bar lifter. Since your machine is fitted with a vibrator, there is no need to place the fabric into darning hoops. Simply guide it under the needle free-hand. Use a thin No. 70 needle.

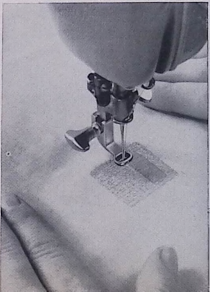
◀ The free darning arm is ideal for darning tubular articles, such as sleeves, trouser legs and socks. Stitch back and forth across the hole, first lengthwise, then crosswise.

Remember that "a stitch in time saves nine" and reinforce spots that have worn thin with short stitches made lengthwise and across worn section at high speed. ▼

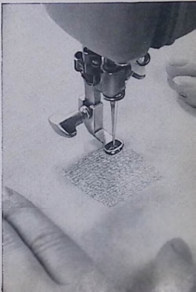
To mend small and medium-size holes, trim ragged edges with the fabric grain. First stitch back and forth across the hole from one side to the other with the machine running at high speed. Then turn the fabric at right angles and sew back and forth over preceding work with short stitches. This anchors the threads in the unworn area around the hole. ▶

Triangular tears are best darned with close stitches made across and lengthwise.

DR 089

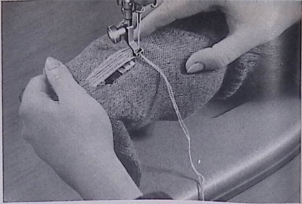


DR 087



53 670

R 6121



Darning Woolen Articles

Machine Setting: Dial A=2 · Lever B= ↓

Attach darning foot, as instructed on page 24, drop machine feed, and lower presser bar lifter. Since your machine is fitted with a vibrator, there is no need to place the fabric into darning hoops. Simply guide it under the needle free-hand.

For darning woolen socks, pullovers and other woolen articles on the free darning arm, use a filler thread the same color as the article to be darned. Lace filler thread through the hole in the foot. Place thread back and forth across damaged spot and anchor it in unworn area. Sew across filler thread with zigzag stitches.

Darning without Foot

Machine Setting: Dial A=0 · Lever B= ↓

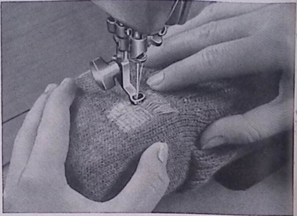
▼

R 6067

Prepare your machine for darning as follows:

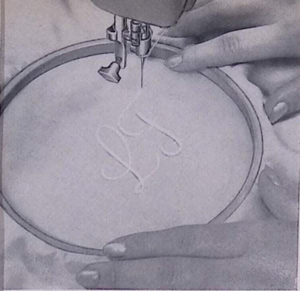
Remove presser foot and drop machine feed. Use feed cover plate No. 60407 to increase tautness of fabric in hoops and permit free movement. To fasten the feed plate to the machine, slip its finger into the hole in the front edge of the needle plate.

Place fabric into darning hoops.



R 6122

This technique is used primarily to darn small holes in delicate fabrics, such as nylon.



R 5926

Monogram Embroidery

Machine Setting:
Dial A=3 to 4 (optional) · Lever B=↓ · Dial C=0 · Lever E=0

◀ Script letters are best for monogram embroidery without a sewing foot. It requires a little practice. You will soon enjoy creative embroidery once you have learned to move the material at a uniform rate. The fabric should be held taut in the hoops, the presser bar suspended and the presser bar lifter lowered. Drop machine feed, lower needle into fabric at the beginning of your design and draw bobbin thread up through the fabric. Hold both thread ends and sew over outline, moving hoops slowly and evenly. To give your monogram dimensional quality, embroider outline twice. Be sure stitches are closely spaced.

46121

Sewing Monograms

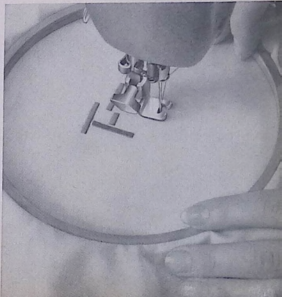
Machine Setting:
Dial A=2½ · Lever B=↓ · Dial C=0 · Lever E=0
(Monogramming foot No. 43737 available on special request.) ▶

The procedure below is primarily used for block letters. Raise machine feed and set machine for satin stitch. Watch that seams do not overlap at joints of letters. To raise monogram, insert a filler thread (cotton or pearl thread).

53670

The vibrator of your machine (see page 24) makes it possible to sew both block and script letters with the machine feed dropped and the darning foot attached, guiding the material free-hand.

Ask your Pfaff dealer to show you Pfaff's Ornamentograph, the ingeniously designed monogram and ornamental stitch attachment. You will marvel at this versatility and delight in its countless creative possibilities.



R 7165

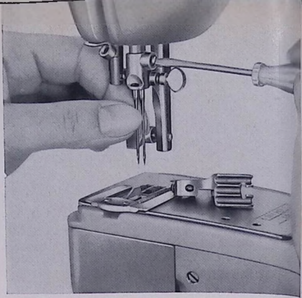
Cording

To cord on your Pfaff-Automatic, use Cording Kit No. 50117 which is available at extra cost.

The Cording Kit comprises:

4 double-needle holders for needle distances of 1/16, 5/64, 3/32 and 7/64 inch; 3 cording feet; 3 cording plates (2 with cord ducts and 1 with center claw); 1 package of System 130 B needles; and 1 screwdriver. Additional parts for heavier cording are available at extra cost.

The interchangeable double-needle holder is easy to attach.



R 7370

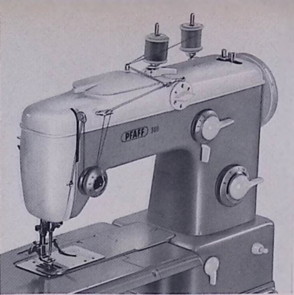
R 7373

Changing the Needle Holder

Bring take-up lever to highest point, loosen small set screw and change needle holders. Tighten set screw securely. The large needle set screw must always point toward the right.

Use System 130 B round-shank needles in 1/16 and 5/64-inch double-needle holders, and System 130 R flat-shank needles in 3/32 and 7/64-inch needle holders.

To attach cording plate, refer to instructions on page 50 for mounting feed cover plate.



R 8345

Increase the bobbin thread tension slightly for cording. Pfaff recommends you fill your cording so it keeps its shape in the laundry. Filler cord thickness depends on cording size you want. To sew filled cording, use the two cording plates with cord ducts.

Only very narrow tucks are made without filler cord.

Machine Setting: Dial A=0 · Lever B=⬇ · Dial C=0 · Lever E=0
(Both needles are to be threaded by hand.)

Additional Information on Cording

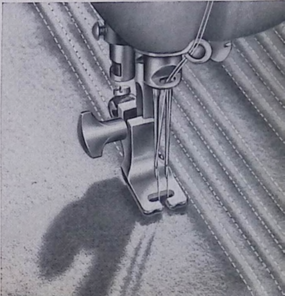
Ordinary cording in medium-heavy fabric is made with cording foot No. 41 319 and cording plate No. 41 842.

For thicker cording use foot No. 41 318 with cording plate No. 105 996.

Cording foot No. 41 641 and plate No. 60417 (with center claw, but without cord duct) serve to make narrow air tucks in lightweight material.

Pin tucks also are made with cording foot No. 41 641, but without cording plate.

Cording plate No. 60413 with high center claw is used chiefly for cording in thick felt. Cording height and width are determined by the distance between the two needles, the cord diameter and the height of the ridge on the cording plate. Thread tensions also influence cording size. For uniform spacing of parallel tucks, attach an adjustable guide to the cording foot. When space between tucks is very narrow, place the preceding seam into one of the grooves of the foot and use it as a guide. This procedure insures uniform and parallel rows of cording.



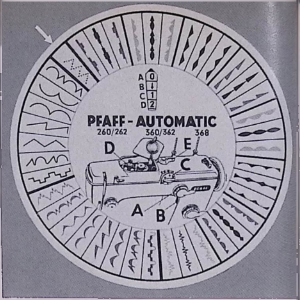
R 6945

DR 839

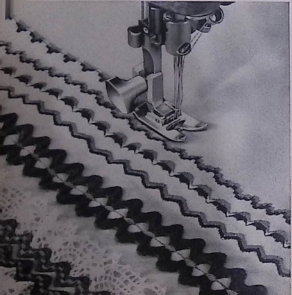
Two-Needle Decorative Sewing

All black patterns on the narrow-design side of the embroidery design dial can be sewn with two needles, if the distance between them does not exceed 5/64 inch. These patterns can be sewn without changing machine parts. To sew all other designs with two needles, the needle plate, machine feed and sewing foot must be changed. Your Pfaff dealer will do this for you at extra cost. These parts have wider slots to allow for movement of both needles.

(Needle holder available at extra cost). ▶



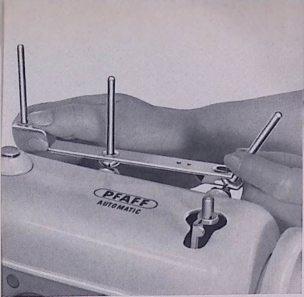
Embroidery design dial with Elastic Seam (arrow)



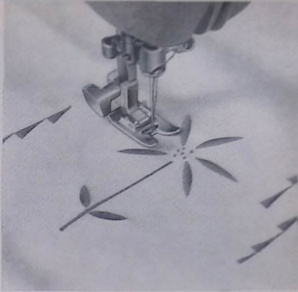
R 7178

◀ Two-needle designs are particularly attractive when sewn with different color thread.

The sewing abilities of your Pfaff Automatic are practically unlimited. Interesting effects can be obtained by combining various designs, embroidering colored ribbons, glamorizing a garment with lace or rick-rack attached with a line of Automatic stitches and – well, you probably can think of many articles which would take on new life with a touch of embroidery. Your Pfaff Automatic will help you solve decorative problems and will stimulate your creative fancy. Combination foot No. 51 366 (available at extra cost) is ideal for decorative stitching.



R 8257



R 7175

Three-Needle Decorative Sewing

To do three-needle sewing, you must buy spool holder No. 53137 which slips over the regular spool pins (see illustration) and have your Pfaff dealer convert your machine to sew a stitch width of about $1/4$ inch. The third thread is led to the needle with the second thread.

After your machine has been converted, you can sew all black patterns on the narrow design side of the embroidery dial with three needles.

Automatic Embroidery ▲

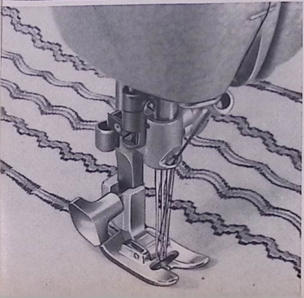
Interesting design effects are easy to make by combining Automatic patterns. Now you can make flower petals and other intricate designs.

The more familiar you are with your machine, the more inspired you will be toward creative sewing.

The Elastic Seam

When setting A=0, B= ◆, C=3, D=8, E=1, and the stitch length control between 0.2 and 0.6, the machine sews the zigzag seam pictured on the design selector wheel (see also page 54 arrow).

This functional seam is firmly anchored in the material and is ideally suited for hemming and other edge finishing operations on elastic materials, such as tricot, jersey, Helanca, Lastex and charmeuse. Additional applications are inserting patches in tricot and linen (see page 39) and attaching elastic.

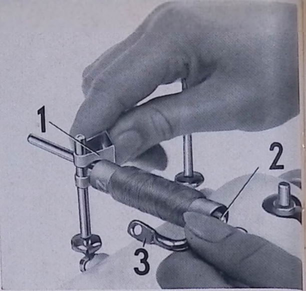


R 7176

The Transverse Spool Holder

To ensure that the thread will unwind evenly from a cross-wound spool, use the transverse spool holder.

To attach the spool holder, slip position spring 1 over the vertical spool pin, the bent portion of the spring pointing toward you. Push the spool of thread on spool pin 2. Press the position spring together, and push pin 2 into the spring slot. With the spring pressed together, adjust its position on the vertical spool pin, as required. When you release the spring, the transverse pin will be held in place firmly. Pass the thread through eyelet 3, and thread the machine as instructed.



R 6533

All-Purpose Sewing Foot (with Clear-View Shoe)

All-purpose sewing foot No. 51 991 is attached as instructed on page 24.

The transparency of its shoe facilitates all sewing operations where it is important to watch the needle penetrate the fabric.

Special application possibilities are discussed on the preceding pages.

Sewing feet and attachments which are not included in the accessory box of your sewing machine can be obtained from your Pfaff dealer.

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